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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,705	05/18/2006	Joseph Kennedy	089498.0482.US	2929
36905	7590	06/17/2011		
Daniel J. Schlue Roetzel & Andress 222 S. Main St. Akron, OH 44308			EXAMINER ZEMEL, IRINA SOPHIA	
			ART UNIT	PAPER NUMBER
			1765	
			MAIL DATE	DELIVERY MODE
			06/17/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,705

Applicant(s)

KENNEDY ET AL.

Examiner

Irina S. Zemel

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2011.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION***Response to Amendment***

Applicant's amendments filed 4-28 fail to comply with the provisions of 37 CFR. 1.121 (C). Specifically, as stated in the rule "The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall **not contain** any other part of the amendment." (Emphasis added). The newly added claims 31 and 32 are presented on the same page with the arguments, and, therefore, fail to comply with the rule.

In addition, as stated in CFR. 1.121 (C)(3), the text of all pending claims not being currently amended shall be presented in the claim listing in *clean version, i.e., without any markings in the presentation of text*. (Emphasis added). Claims 1 and 13 still contain subject matter previously deleted from the claims and marked as deleted by strikethrough.

In order to expedite the prosecution, a separate notice of "Non-compliant amendment" has not been issued at this time. However, such notices will be issued in response to any subsequent amendment that do not comply with the existing rules governing amendments.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1765

Claims 1-5, 7, 9-12, 14-26, and 28-32 are rejected under 35

U.S.C. 102(b) as being anticipated by EP 0949 282 to Kaneka Corporation, (hereinafter "Kaneka '282").

The rejection stands are per reasons of record set for the in the previous office action and incorporated herein by reference. Insofar as newly added claims 31 and 32, as discussed in the office action dated June 6, 2009. Kaneka expressly discloses use of di functional aromatic initiators: "The di-functional aromatic initiator (bis(1 -chloro- 1-methylethyl)benzene or $[C_6H_4(C(CH_3)_2Cl)_2]$ is disclosed as the preferred initiator which results in two arm polymer." (Page 3 of the referenced office action). In addition Kaneka discloses various suitable initiators in [0026], all of the exemplified initiators contain a single aromatic rings, which initiators are mono-si- or tri-substituted. Use of these initiators results in one, two or three arm polymers having aromatic core containing a single benzene ring. It is noted that the initiators disclosed in [0026] of the Kaneka reference exemplify the compounds expressly disclosed on page 7 of the applicants own disclosure and further used in the illustrative example - i.e., tricumyl chloride initiator used in examples, which is identical to the disclosed compound of 1,3,5-tris(1-chloro-1-methylene) benzene. Examples of other compounds found in [0026] of Kaneka '282 ALL correspond to the compounds disclosed on page 7 of the instant invention and ALL results in polymers having aromatic core which contains a single aromatic ring.

The invention as claimed, thus is fully within the purview of the cited reference, and clearly discloses each and every claimed element thus anticipating the claimed invention..

Claim Rejections - 35 USC § 103

Claims 6,8,13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneka '282.

The rejection stands as per reasons of record set for the in the previous office action and incorporated herein by reference.

Claims 1, 7, 9-11 are under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,804,664 to Kennedy et al., (hereinafter "Kennedy '664") in combination with Kaneka '282.

The rejection stands as per reasons of record set for the in the previous office action and incorporated herein by reference.

Response to Arguments

Applicant's arguments filed 4-28-2011 have been fully considered but they are not persuasive. The applicants argue that the rejection of claims is improper because the Kaneka '282 reference "doesn't disclose applicant's claimed element: of an aromatic core having one or more arms extending therefrom; " in addition to Kaneka not disclosing Applicant's "aromatic-core" claim element, it

Art Unit: 1765

appears that the "aromatic-core" claim element isn't even mentioned in the Office Action's reasoning in support of its rejection."

The applicants are incorrect in both their allegations the reference does indeed disclose the claimed limitation and the examiner expressly discussed this limitation in the Office Action dated June 6, 2009. Regarding the discussion of this limitation in the Office action, the referenced office action specifically states on page 3 that "The di-functional aromatic initiator (bis(1 -chloro- 1-methylethyl)benzene or $[C_6H_4(C(CH_3)_2Cl)_2]$ is disclosed as the preferred initiator which results in two arm polymer."

Indeed, the referenced in [0025-26] expressly discloses compounds suitable as initiators for the reaction that produces the claimed block copolymers. Among those initiators, mono-, di-, or tri-functional initiators having a single aromatic ring are expressly disclosed in 26. In fact, the initiator compounds disclosed in [0026] exactly represent species of the genus disclosed by the applicants in their own specification on page 7 as compounds (vii), (viii) and (ix). Initiation of the polymerization reaction initiators expressly disclosed in Kaneka '282, results in copolymers having not only an aromatic core as claimed in claim 1, but also an aromatic core having a single aromatic ring, Just the same way it is disclosed in the instant specification.

The invention as claimed, therefore, is still considered to be unpatentable over the disclosure of cited references.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

Art Unit: 1765

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Irina S Zemel/
Primary Examiner, Art Unit 1765

Irina S Zemel
Primary Examiner
Art Unit 1765

ISZ